

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-255926

(43)Date of publication of application : 30.09.1997

(51)Int.Cl.

C09J 7/02

(21)Application number : 08-069565

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(22)Date of filing : 26.03.1996

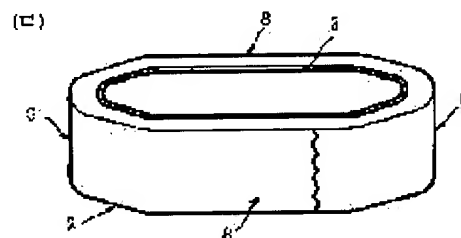
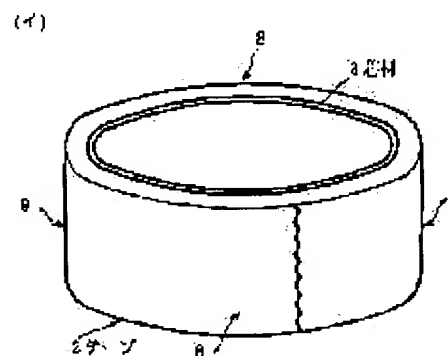
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## (54) PRESSURE-SENSITIVE TAPE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a pressure-sensitive tape which is handy to carry and does not necessitate a large display space.

SOLUTION: A tape 2 having an adhesive layer on one side is wound on a core 3 having an elliptic shape in which the major diameter is 140mm or shorter and the proportion of the minor to the major diameter is 50% or lower, or no a core 3 capable of being deformed into the elliptic shape.



## LEGAL STATUS

[Date of request for examination] 01.11.1996

[Date of sending the examiner's decision of rejection] 09.02.1999

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's

decision of rejection]

[Date of requesting appeal against examiner's  
decision of rejection]

[Date of extinction of right]

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## CLAIMS

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[Claim(s)]

[Claim 1] The adhesive tape characterized by for the ratio of a minor axis [ as opposed to this major axis in a major axis ] coiling around the core material (3) of the shape of 50 or less % of an ellipse the tape (2) which prepared the glue line (1) in one field by 140mm or less, and changing.

[Claim 2] The adhesive tape characterized by coiling and growing into the core material (3) which can deform the ratio of a minor axis [ as opposed to / in a major axis / this major axis at 140mm or less ] for the tape (2) which prepared the glue line (1) in one field in the shape of [ 50 or less % of ] an ellipse.

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DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to the adhesive tape which adheres and grows adhesives into one field.

[0002]

[Description of the Prior Art] Although the comparatively big cross-section configuration to which the diameter of the whole tape on which tape width of face is 50mm or 25mm, and was wound around the core material amounts to about 130mm is the thing of the shape of a hollow cylinder of a perfect circle mostly, the most general thing of this kind of adhesive tape There are many requests in case it travels, that he wants to bring from a use being various, such as eye tacking [ the simplicity at the time of use and packing, an eye stop, and ] and repair, and they are positioned as one of what [ the ] should not be lacked required by the end of today.

[0003]

[Problem(s) to be Solved by the Invention] Thus, although he wants to place a convenient adhesive tape close usually, since it is large-sized like the above, the reservation of an exhibition space [ in / about / that a walk is difficult / and a dealer / it has and ] put into a bag, a bag, etc. is not easy for it, either. Therefore, the actual condition is that the store sold is also mostly limited comparatively to a large store or a specialty store, and are seldom sold in small-scale stores, such as a kiosk of the station where an eye tends [ comparatively ] to be attached, and the so-called convenience store, but acquisition of emergency is difficult.

[0004] this invention is accomplished in view of the above-mentioned actual condition, and a cellular phone is easy and aims [ this invention ] at offer of the adhesive tape which moreover does not take a space to exhibition at a shop front.

[0005]

[Means for Solving the Problem] The adhesive tape by this invention accomplished in order to solve the above-mentioned technical problem is characterized by coiling and growing into the core material which a major axis is 140mm or less, the ratio of the minor axis to this major axis is the core material of the shape of 50 or less % of an ellipse, and whose major axis is 140mm or less, and can deform the ratio of the minor axis to this major axis for the tape which prepared the glue line of acrylic resin or a rubber system in one field in the shape of [ 50 or less % of ] an ellipse.

[0006]

[Embodiments of the Invention] Hereafter, the gestalt of operation of the adhesive tape by this invention is explained based on a drawing. Drawing 1 shows the example. The resin of this lamination layer is made to permeate in a base fabric 4, and this adhesive tape coils around a core material 3 the tape 2 of the front face of the tape base fabric 4, and a rear face which adhered the pressure-sensitive glue line 1 which consists of acrylic resin to the front face of the lamination layer 5 of one of the front reverse sides while forming the lamination layer 5 in the whole surface at least.

[0007] The aforementioned tape 2 uses the flat yarn of a polyethylene system resin or a polypropylene resin as circumstances thread 6 and 7. Warp 6 serves as warp 6 50-250 deniers, and serves as a low denier from the woof 7 in 200-400 deniers in the woof 7. And the foldout density of warp 6 is set up more highly than the

foldout density of the woof 7, for example, placing density of warp (115 deniers) 6 is made into 16 placing densities/inch of 46 [ /inch ] and the woof (320 deniers) 7, and it weaves and changes. It \*\*, and this tape 2 will be excellent in solatium nature, and will have the tensile strength which may moreover cease in practical use with sufficient balance. Although the thickness of a tape 2 is increasing by attaching the aforementioned lamination layer 5, the buffer by the thread gap at the time of the position of each thread 6 and 7 being fixed and existence of this lamination layer 5 tearing off a tape 2 is suppressed, and it is contributing to improvement in solatium nature greatly.

[0008] Paper, polypropylene resin, a polyethylene resin, a Nylon, or polyester resin is used for the core material 3 which coils this tape 2. For example, the thickness is set up at 0.5mm or more as thinly as possible for the cross-section configuration by which the ratio of a minor axis [ as opposed to / constitute with the curved surface which the whole front face, on the other hand, accepts the core material made of paper to \*\*, and curves, and a major axis is 140mm or less, and / this major axis ] was crushed to 50 or less % to form in an ellipse-like barrel, and give suitable elasticity. Although twisting annularly due to a use is indispensable as for the adhesive tape, it attaches [ a stubborn fold ] for every tape fixed length and is not desirable in a thing plate-like in the core material to twist. There is deformans flexibly with the curved surface on which the whole front face accepts and curves from such a background to \*\* on the other hand in principle as a peripheral surface, and stability also makes a certain barrel a core material. However, about the center section of the field almost parallel to the long side like drawing 2 , since it is unrelated to generating of a fold, it does not interfere as a nearly perfect flat surface. Hereafter, this field is temporarily described as the flat-surface section 8.

[0009] If it constitutes and \*\*\*\*\* of a tape 2 is also stopped to 10mm or less like the above Though the configuration of the whole adhesive tape can be made to deform somewhat according to a receipt part and also it is crushed in the state temporary almost near a plate on account of conveyance It returns with the elasticity, the effect of making it a stubborn fold not attached can also be expected, and it is possible to also make a cross-section configuration easy to use for a perfect circle in the case of use, bringing close a little. In addition, since the thickness of a core material is set up before and after 3mm and, as for the conventional adhesive tape, \*\*\*\*\* of a tape was moreover also prepared 20mm or more, deformation according to the receipt part was hardly able to be desired.

[0010] \*\* it may become difficult for the piece (the aforementioned flat-surface section 8) of the longitudinal direction which curved comparatively gently to become short, and for the tape 2 which exfoliated from the roll (thing in the state where of the tape 2 was coiled around the core material 3), at the time of use to lenticulate finely, and to stick with sufficient appearance on the other hand if the major axis of the aforementioned core material 3 is short namely, -- the above -- the length of the tape 2 which can coil if desirable \*\*\*\*\* satisfies is Therefore, what is necessary is just to let [ as a major axis of the core material 3 of the adhesive tape by this invention, ] 70mm or more be a standard at the thing of 25mm width of face by the thing of 50mm or more and 50mm width of face, for example, although it changes also with tape width of face.

[0011] Furthermore, it can prevent certainly that a crease also produces the part (it is hereafter described as the acute section 9.) where a knee is the sharpest on loosest possible curved surface, then tape 2 in a core material 3. Although it is desirable to attach reinforcing materials with the curved surface as for a cylinder with the small path of the grade which does not spoil the flat state of a core material 3 etc. so that the part concerned may not collapse and be radicalized for example, if it can do, when coiling the tape 2 to which a fold is not easily attached by the relation between thickness or a material, it may be necessary to ask for the looseness of the acute section positively.

[0012] Although scissors etc. are not needed since the adhesive tape formed like the above has the outstanding solatium nature, even if it coils a paper tape in respect of solatium nature, the almost same effect is acquired, and the adhesive tape used for the use which does not require good solatium nature on the other hand can also coil and constitute a vinyl tape and a nylon tape.

[0013] When using the core material made of a Nylon or polyester resin, a major axis is 140mm or less, and the cross-section configuration for which for example, 50 or less % of cross-section configuration may deform the ratio of the minor axis to this major axis in the shape of an ellipse carries out temporary fabrication mostly

at the cylindrical shape of a perfect circle. Although the thickness of a core material has the thinner possible desirable one, as a practical use range, it is 0.3mm or more. Since the core material of a Nylon or polyester resin deforms comparatively freely, it can fabricate in the shape of [ which was crushed ] an ellipse at the time of carrying, it can be fabricated in the state almost near a perfect circle at the time of use, and its workability is good. if two or more end eyes may be attached to the inside of a core material after coiling on the other hand if it is in the core material made of paper to the example using synthetic resin and papers other than the aforementioned Nylon or polyester resin which cannot deform easily as a material of a core material, and it is in the core material made of a resin -- beforehand -- the inside of a core material -- metal mold -- with, two or more end eyes may be attached

[0014]

[Effect of the Invention] An operator always puts [ in / various work sites / since it is possible to be a configuration with the flat adhesive tape according to this invention like the above, or to make it deform into a flat configuration, if it is in a travel etc., can contain in the back's corner, can use it suitably if needed and ] into a pocket etc., and it can be used suitably. Moreover, since the centrum which existed in the center of a core material of the conventional adhesive tape is lost, the miniaturization of not only the product itself but a packing material and flattening become possible, and delivery efficiency also improves, in case it ships as a product, and also it contains into a nylon bag etc. almost and can lower to it if it is in the sale in a store, it can defer easily also at a small-scale retail store without a large exhibition space. Consequently, from a consumer side, as well as portable dust paper if it always has and you do not walk, when required, it can purchase in a nearby kiosk and a nearby convenience store, and it is thought that facilities increase above more.

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